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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: PORTER *ET AL.*

APPLICATION No.: 09/876,942

FILED: JUNE 8, 2001

FOR: **METADATA QUALITY IMPROVEMENT**

EXAMINER: G. SAIN

ART UNIT: 2176

CONF. No: 9076

Reply Brief

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APPELLANTS' REPLY BRIEF UNDER 37 C.F.R. § 41.41

Sir:

This reply brief is in response to the Examiner's Answer dated August 10, 2006.

I. REPLY TO ANSWER

A. Reply to Examiner's answer concerning claims 15, 16 and 18-21

On page 3 of the Examiner's Answer, the Examiner states the following:

Claims 15, 16, and 18-21 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter. Claims 15, 16 and 18-21 set forth functional descriptive material but fail to set forth physical structures or materials comprising of hardware or a combination of hardware and software within the technological arts (ie., a computer) to produce a "useful, concrete and tangible" result. For example, in [sic] claim 15 recites a signal with instructions for making an addition to a database. Signals are not statutory as they fail to fall into one of the four statutory categories of invention. The language "computer data" does not

"computer data" does not clearly define structural elements and is not tangibly embodied on a computer readable medium.

Appellants respectfully disagree. First, as for failing to set forth physical structures or materials within the technological arts, Appellants respectfully submit that claims 15, 16 and 18-21 are directed to statutory subject matter in that the Board of Patent Appeals and Interferences recently held that there is currently no judicially recognized separate "technological arts" test to determine patent eligible subject matter under § 101. *Ex parte Lundgren*, Appeal No. 2003-2088 (Bd. Pat. App. & Interf., Apr. 20, 2004). Second, Appellants respectfully submit that data signal claims are statutory subject matter if they (1) are manufactured (i.e., not a natural phenomenon), (2) are directed to functional descriptive material, and (3) recite a practical application or cover a specific manufacture. Data signal claims are approved as statutory subject matter by training materials distributed by the USPTO. *Training Materials for the Computer-Related Invention Guidelines*, Tab 11, "Compression/Encryption Examples," Example 13. Those materials include the following example claim:

A computer data signal embodied in a carrier wave comprising:
a compression source code segment comprising [the code]; and
an encryption source code segment comprising [the code].

This example was later cited favorably in a law review article written by the Solicitor of the USPTO, Nancy J. Linck, and co-authored by the Assistant Solicitor of the USPTO, Karen A. Buchanan, who participated in the drafting of the above-referenced training materials. *Patent Protection For Computer-Related Inventions: The Past, The Present, And The Future*, Hastings Communications And Entertainment Law Journal, VI. 18, No. 4. In that article, the above example was recited as an example of a statutory article of manufacture claim because it recites a specific manufacture. The article also stated that the claim was statutory because it has a practical application in the technological arts in that "it can be used to monitor and control the physical processes in an automated manufacturing plant." *Id.* at pp. 677-678.

Claims 15, 16 and 18-21 recite a generated data signal embodied in a carrier wave with the practical application of identifying metadata in a URI for a streaming media file that is associated with original metadata that is maintained in a database, and adding the associated metadata to the original metadata in the database. These claims recite data

signals that (1) do not occur naturally, (2) are directed to functional descriptive material, and (3) recite a practical application of reorganizing the fields of a URI for a streaming media file, analyzing the fields of the URI to determine whether an association exists between the fields and original metadata maintained in the database, and adding the metadata associated with the analyzed fields to the original metadata in the database. Accordingly, Appellants respectfully submit that these claims recite statutory subject matter.

B. Reply to Examiner's answer concerning claims 1, 2, 5-12, 15 and 18-21

On pages 10-11 of the Examiner's Answer, the Examiner states the following:

Jacobs teaches the claim limitation of *analyzing each field of said plurality of fields of said URI associated with a file; identifying metadata that is associated with said each analyzed field; and adding said associated metadata to original metadata in said database*. For example, Jacobs discloses a URI portion that includes transaction state information and cartridge engine information, which is used to identify the state of multiple-request transactions, the metadata associated with the browser request is forwarded by the dispatcher that forwards the URI information, upon receiving the browser request, the virtual path manager to locate a pointer to a cartridge associated with the browser request and then send a revised browser message to the cartridge instance (col 21, lines 40 – col 22, line 15). Additionally, Jacobs discloses identifying previously stored metadata for a transaction associated with the revised browser message associated with a commit transaction URI (col 26, lines 44-48).

Appellants respectfully disagree. Contrary to the Examiner's position, Jacobs does not teach or suggest adding said associated metadata [that is associated with said plurality of fields of said URI associated with a streaming media file] to said original metadata in said database. Jacobs clearly indicates that the metadata concerns configuration information regarding the cartridges, and that the configuration provider stores the metadata during the registration of the cartridges. (Jacobs, 9:17-57.) According to Jacobs, the stored metadata is a mapping of a cartridge name to a type of transaction. Jacobs also explains that the URI portion of the URL includes a cartridge name which is used to identify the cartridge type and allows the cartridge execution engine to identify the metadata that is associated with the browser request. (Jacobs, 21:44-52, 23:67-24:3.) Jacobs further explains that the metadata contains information about the transaction type associated with the particular browser request. (Jacobs, 23:54-57, 26:39-48, 28:19-29.) In Jacobs, the

stored metadata is used to identify the type of transaction that is associated with a browser request or a revised browser request. Jacobs contains no teaching or suggestion of adding the transaction state information or the cartridge name (i.e., the metadata) that is contained in the URI associated with a browser request to the stored configuration information (i.e., original metadata) for the cartridge identified by the cartridge name contained in the URI. This is consistent with Jacobs' stated purpose of having the server remaining stateless by not persistently maintaining the state information which is unknowingly maintained by the clients making the requests. (Jacobs, 32:44-55.)

On page 11 of the Examiner's Answer, the Examiner also states the following:

The Examiner interprets Jacobs' URI portions transaction and cartridge as equivalent to the claimed metadata fields. The Examiner interprets Jacobs' disclosure of the revision of the browser message as equivalent to the claimed metadata that is added to the associated original metadata because the dispatcher revises the browser upon locating more information that is that is associated with the cartridge and adds data if needed.

The Examiner's position is illogical: using the stored metadata to generate a revised browser message is not the same as adding associated metadata to an original metadata in a database, as recited. According to Jacobs, the stored metadata is used to generate a revised browser message. (Jacobs, 23:28-53.) As discussed above, Jacobs contains no indication of adding metadata that is contained in a browser request to the stored metadata.

On page 12 of the Examiner's Answer, the Examiner states the following:

Jacobs teaches the claimed limitation of *adding said associated metadata to said original metadata in said database*. The Examiner characterizes this limitation as modifying metadata that is already stored in the database. For example, Jacobs discloses a method for incorporating state information into a URL where the transaction manager sends a commit request to database server and to cause changes in response to various browser requests to be committed in the database (col 27, line 65 – col 28, line 3), using the previously stored metadata (col 28, lines 26-29). Since the database already contains metadata, the new data that causes change in the database is interpreted as adding onto the already existing data in the database.

Appellants respectfully disagree. Appellants are perplexed as to how the Examiner arrives at the conclusion that "[s]ince the database already contains metadata, the new

data that causes change in the database is interpreted as adding onto the already existing data in the database." Jacobs clearly explains that the commit request that is sent to the database servers "cause[s] all changes made in response to the various browser requests that belonged to the multiple-request transaction to be committed as an atomic unit of work." (Jacobs, 27:65-28:3.) The changes to the database result from committing a multiple-request database operation. Jacobs contains no indication that the changes to the database that result from committing the multiple-request database operation as an atomic unit of work involve adding to the stored metadata (i.e., the configuration information regarding the registered cartridges). Simply put, a change in the database resulting from a database operation as disclosed by Jacobs does not teach or suggest adding said associated metadata to said original metadata in said database, as recited.

On page 13 of the Examiner's Answer, the Examiner states the following:

Specifically, Eyal teaches adding the URL (and metadata) of the selected medial [sic] clip to store, where the user can change the order of the play-list stored on the network server and accessed using the medial [sic] location and playback module (col 31, line 65 – col [3]2, line 25). The examiner interpret [sic] reordering of the play-list as equivalent to reorganizing the fields because reordering of data organized data in a different manner and Eyal teaches doing this reordering process for URL (and related metadata).

Appellants respectfully disagree. Claims 11, 12, 15 and 18-21 recite "reorganizing said plurality of fields of said URI associated with said streaming media file," or similar language. Eyal clearly explains that a play-list contains the verified media links, which are verified URLs. (Eyal, 12:28-29, 64-67.) Accordingly, changing the order of a play-list (Eyal, 32:12-13) merely amounts to changing the order of the URLs contained in the play-list. Therefore, contrary to the Examiner's position, changing the ordering of multiple URLs cannot be interpreted as being equivalent to reorganizing the fields of a single URI (URL), as recited.

On pages 13-14 of the Examiner's Answer, the Examiner states the following:

The Examiner disagrees because the references do not teach away from the claimed invention. The claims are silent about incorporating database tables. The Examiner characterizes the claimed invention as modification of metadata that is already stored in the database. Accordingly, the combination of references, Jacobs, Eyal and Call teach this characterization. Specifically, Jacob's discloses identifying previously

stored metadata for a transaction associated with the revised browser message associated with a commit transaction URI (Jacobs, col 26, lines 44-48) using previously stored metadata. Eyal discloses a database for storing metadata associated with streaming media links (Eyal, col 6, lines 4-10) and Call teaches using universal product codes with a URL table allowing a web search engine that can perform web crawler indexing of the websites specified by the listed IP address (Examiner interprets IP address as equivalent to URI based on the appellant's specification, paragraph 34), thereby generating an index to items in the table. All three references are combinable because they teach a database accessible via network (i.e., internet) for providing information through the use of accessing data using a locator or identification.

Appellants respectfully disagree. First, the claimed invention cannot be characterized as merely a modification of metadata that is already stored in the database. According to M.P.E.P. § 2141.02, the question under 35 U.S.C. § 103 in determining the differences between the prior art and the claims is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious. *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983). Moreover, distilling an invention down to the “gist” or “thrust” of an invention disregards the requirement of analyzing the subject matter “as a whole.” *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984). Appellants' claimed invention is directed to techniques for enhancing the quality of metadata that is associated with streaming media files. For example, according to one technique, when a search system finds a streaming media file, the search system enhances the metadata associated with the streaming media which is stored in a database by adding to the database the additional metadata derived from the contents of the fields in the Uniform Resource Indicator (URI) of the streaming media file. Accordingly, Appellants' claimed invention amounts to much more than merely a modification of metadata that is already stored in the database. Second, Jacobs specifically states that the server remains stateless by not persistently maintaining the state information retrieved from the URI. (Jacobs, 32:54-55.) Therefore, contrary to the Examiner's position, Jacobs expressly teaches away from combining with references such as Call that teach storing state information in a database.

C. Reply to Examiner's answer concerning claims 3 and 16

On page 14 of the Examiner's Answer, the Examiner states the following:

Jacobs in view of Eyal and Call does not teach, but Gabriel teaches reorganizing said plurality of fields in reverse order. For example, Gabriel discloses a ranking and selection process that could be reversed (col. 6, lines 25-27).

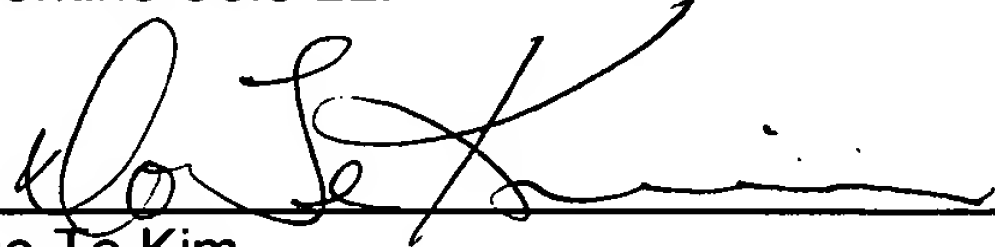
It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Jacobs in view of Eyal and Call to include the reverse ranking process as taught by Gabriel, providing the benefit of indexing network information with searches for files of information relevant to people and resources using weighted links (Gabriel, Abstract section).

Appellants respectfully disagree. Claims 3 and 16 recite reorganizing a plurality of fields of a URI in reverse order. In contrast, Gabriel's ranking and selection process is a ranking and selection of links to files. (Gabriel, Abstract, 6:10-27.) None of the links described by Gabriel has its fields reorganized in reverse order, as recited. Therefore, even assuming for the sake of argument that there is a suggestion to combine Jacobs, Eyal, Call, and Gabriel, the combination of these references still would not teach or suggest reorganizing the plurality of fields of a URI in reverse order, as recited.

For at least these reasons, along with the reasons presented in Appellants' Appeal Brief, each of claims 1-3, 5-12, 15, 16 and 18-21 has been improperly rejected. Accordingly, Appellants seek the reversal of the rejection of these claims.

The Commissioner is hereby authorized to charge any shortages or credit any overpayment associated with this filing to our Deposit Account No. 50-0665, under Order No. 283108005US from which the undersigned is authorized to draw.

Respectfully submitted,
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